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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,644	11/21/2003	Kunio Yoneno	244896US2CONT	9150
22850	7590	06/09/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SHERMAN, STEPHEN G	
			ART UNIT	PAPER NUMBER
			2629	
DATE MAILED: 06/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/717,644

Applicant(s)

YONENO, KUNIO

Examiner

Stephen G. Sherman

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27,46 and 69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27,46 and 69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 08/804,069.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5-17-06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 27 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,731,343. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 27 of the current application is a broader version of claim 7 of U.S. Patent No. 6,731,343.

The method of claim 7 of U.S. Patent 6,731,343 differs from claim 27 of the current application in that it recites further that step (c) comprises the steps of: (i)

transforming the image data to transformed image data using a symmetrical monotone transformation function that has a symmetrical output level with respect to a predetermined input level; and (ii) determining said number of beats based on said transformed image data. The claims also differ in that claim 27 of the current application recites broadly of generating first dot clock and second dot clock signals based on a horizontal synchronizing signal and a first factor and a horizontal synchronizing signal and a second factor, respectively, and claim 7 of U.S. Patent No. 6,731,343 recites that the first dot clock and second dot clock signals are generated by multiplying a frequency of a horizontal synchronizing signal by a first factor and by multiplying a frequency of a horizontal synchronizing signal by a second factor, respectively.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to modify claim 7 of U.S. Patent No. 6,731,343 to claim the basic principles of the method as in claim 27 of the current application in order to broadly encompass the general concept of the invention such that it could be applicable to other variations. And since the present claim 27 is in comprising format which includes any unclaimed features thereof, the present claims are not patentably distinct from the patented claims.

3. Claim 46 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,731,343. Although the conflicting claims are not identical, they are not patentably distinct from each other

because claim 46 of the current application is a broader version of claim 7 of U.S. Patent No. 6,731,343.

Claim 46 is directed to the apparatus for performing the method of claim 27 of the current application, the differences between claim 27 of the current application and claim 7 of U.S. Patent No. 6,731,343 being explained above. Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to modify claim 7 of U.S. Patent No. 6,731,343 to claim the apparatus for performing the basic principles of the method in claim 27 of the current application as in claim 46 of the current application in order to provide for means which would enable the method as described in claim 27 of the current application to be performed.

4. Claim 69 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14, 16, 17, 18 and 20 of U.S. Patent No. 6,731,343. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 69 of the current application merely combines the concepts brought forth within the claims of U.S. Patent No. 6,731,343.

The method of claim 69 of the current application differs from claims 14, 16, 17, 18 and 20 of U.S. Patent No. 6,731,343 in that claim 69 recites of step (ii) comprising the steps of:

*determining said number of beats using at least one of said first through third binary data;*  
*providing a first pair of binary data including said first and second binary data and a second pair of binary data including said second and third binary data;*

*executing a toggle operation, with respect to each of said first and second pairs of binary data, using a rise of one binary data of each pair and a rise of the other of each pair to generate two toggled binary data for said first and second pairs of binary data;*

*selecting one of said two toggled binary data which has an average closer to 0.5., and measuring a number of pulses included in one line of said selected toggled binary data, thereby determining said number of beats,*

*wherein said step of measuring a number of pulses comprises the steps of:*

*deleting an interval between a rise and a fall of said selected binary data that is less than a predetermined value, thereby generating modified binary data; and*

*measuring a number of pulses included in one line of said modified binary data, thereby determining said number of beats.*

Whereas in U.S. Patent No. 6,731,343 step (ii) can comprise the steps of:

*providing a first pair of binary data including said first and second binary data and a second pair of binary data including said second and third binary data;*

*executing a toggle operation, with respect to each of said first and second pairs of binary data, using a rise of one binary data of each pair and a rise of the other of each pair to generate two toggled binary data for said first and second pairs of binary data;*

*selecting one of said two toggled binary data which has an average closer to 0.5., and measuring a number of pulses included in one line of said selected toggled binary data, thereby determining said number of beats.*

as recited in claim 18, or step (ii) can comprise the steps of:

*Selecting at least one of said first through third binary data and*

*deleting an interval between a rise and a fall of said selected binary data that is less than a predetermined value, thereby generating modified binary data;*

*selecting one of said two toggled binary data which has an average closer to 0.5., and*

*measuring a number of pulses included in one line of said modified binary data, thereby determining said number of beats.*

as recited in claim 20.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to have step (ii) of claim 17 of U.S. Patent No. 6,731,343 comprise of the combination of the limitations of both claims 18 and 20 so as to produce claim 69 of the current application in order to provide a specific detailed manner in which the number of beats can be calculated.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cappels, Sr. (US 5,731,843) discloses an apparatus and method for automatically adjusting a pixel sampling clock frequency and phase of a video display to match the frequency and phase of a pixel clock used to generate an incoming video signal being received by the video display.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

6 June 2006



RICHARD KIERPE  
SUPERVISOR EXAMINER  
TECHNICAL UNIT 2600